

	Global Analysis	Local Analysis
$a_1 = \text{malloc}(2)$	$\text{GR}(a_1) = \{\text{loc}_1 + [0, 0]\}$	$\text{LR}(a_1) = \text{loc}_1 + [0, 0]$
$a_2 = a_1 + 1$	$\text{GR}(a_2) = \{\text{loc}_1 + [1, 1]\}$	$\text{LR}(a_2) = \text{loc}_1 + [1, 1]$
$a_3 = \phi(a_1, a_2)$	$\text{GR}(a_3) = \{\text{loc}_1 + [0, 1]\}$	$\text{LR}(a_3) = \text{loc}_2 + [0, 0]$
$a_4 = a_3 + 1$	$\text{GR}(a_4) = \{\text{loc}_1 + [1, 2]\}$	$\text{LR}(a_4) = \text{loc}_2 + [1, 1]$
$a_5 = a_3 + 2$	$\text{GR}(a_5) = \{\text{loc}_1 + [2, 3]\}$	$\text{LR}(a_5) = \text{loc}_2 + [2, 2]$